

Claims

1. A halogen-free, phosphorus-free, flame-resistant wrapping foil of polyolefin, comprising carbon black and metal hydroxide, the wrapping foil having an FMVSS
5 302 horizontal-sample flame spread rate below 200 mm/min, preferably below 100 mm/min, and being in particular self-extinguishing under the test conditions specified in FMVSS 302.
2. The wrapping foil of claim 1, characterized in that the metal hydroxide is aluminum
10 hydroxide, preferably magnesium hydroxide.
3. The wrapping foil of claim 1 or 2, characterized in that the metal hydroxide content is more than 120 phr, preferably more than 150 phr.
- 15 4. The wrapping foil of at least one of the preceding claims, characterized in that the carbon black fraction is at least 5 phr, preferably at least 10 phr, the carbon black preferably having a pH of 6 to 8.
- 20 5. The wrapping foil of at least one of the preceding claims, characterized in that the wrapping foil comprises at least one polypropylene having a flexural modulus of less than 900 MPa, preferably of 500 or less and more preferably of 80 MPa or less, and/or a crystallite melting point of between 120°C and 166°C, preferably below 148°C, more preferably below 145°C.
- 25 6. The wrapping foil of at least one of the preceding claims, characterized in that the thickness of the wrapping foil is 30 to 180 µm, particularly 50 to 150 µm, more particularly 55 to 100 µm, the force in machine direction at 1% elongation has a value of 0.6 to 5 N/cm, particularly 1 to 3 N/cm,
30 the force at 100% elongation has a value of 2 to 20 N/cm, particularly 3 to 10 N/cm, and/or the crystallite melting point of the polypropylene copolymer is less than 166°C.

7. The wrapping foil of at least one of the preceding claims, characterized in that in the wrapping foil there are not only the preferred polypropylene polymer but also ethylene-propylene copolymers from the classes of EPM and EPDM copolymers.
- 5 8. The wrapping foil of at least one of the preceding claims, characterized in that the wrapping foil has
on one or both sides, particularly on one side, a layer of adhesive, based preferably on polyisoprene, ethylene-vinyl acetate copolymer and/or polyacrylate, and if desired has a primer layer between foil and adhesive layer,
10 the amount of the adhesive layer being in each case 10 to 40 g/m², preferably 18 to 28 g/m²,
the bond strength to steel being 1.5 to 3 N/cm,
the unwind force being 1.2 to 6.0 N/cm at 300 mm/min unwind speed, preferably 1.6 to 4.0 N/cm, more preferably 1.8 to 2.5 N/cm, and/or
15 the holding power being more than 150 min.
9. The wrapping foil of at least one of the preceding claims, characterized in that the wrapping foil has a solvent-free pressure-sensitive adhesive which is produced by coextrusion, melt coating or dispersion coating, preferably a dispersion-based
20 pressure-sensitive adhesive, and in particular one based on polyacrylate, said adhesive being joined to the surface of the carrier foil by means of a flame or corona pretreatment or of a layer of adhesion promoter which is applied by coextrusion or coating.
- 25 10. The wrapping foil of at least one of the preceding claims, characterized in that the oxygen index (LOI) is above 20%, preferably above 23% and more preferably above 27%.
- 30 11. The use of a wrapping foil of at least one of the preceding claims for bundling, protecting, labeling, insulating or sealing air-supply pipes or wires or cables and for wrapping cable looms in vehicles or field coils for picture tubes.